

Modern Magic: Black Math PhDs from 2000 to Present

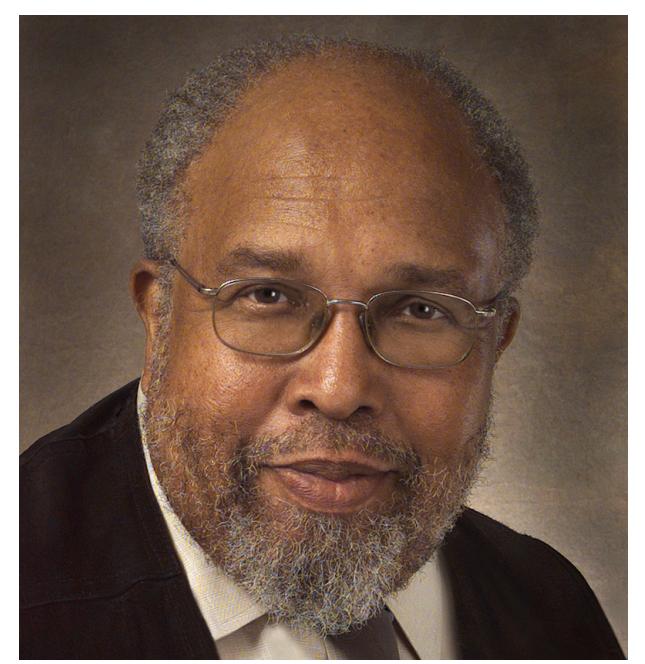
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MADDER: Mathematicians of the African Diaspora Database's Ensemble of Researchers

Abstract

A group of undergraduate researchers under the supervision of Dr. Edray Goins (Pomona College) and Dr. Robin Wilson (Cal Poly Pomona) have undertaken Scott Williams' original project to highlight mathematicians of the African Diaspora and are currently expanding that same database. One subgroup, in particular, is focusing on uncovering the names of those with Ph.D.s in Mathematics from the year 2000 to the present day. This poster highlights their process, key findings, and overall takeaways from the project.

Mathematicians of the African Diaspora (MAD Pages)



Scott W. Williams

Williams introduced the site in 1997. There are more than 1,000 pages featuring Biographies and Stories. [He stopped updating them in 2008](#).

Updated MAD Pages



Don King



Asamoah Nkwanta



John Weaver

<https://www.mathad.com/home>

Goins, King, Nkwanta, and Weaver have been working since 2010 to update the Pages. [There are 800 names in the MAD Pages Database](#).

MAD Database's Ensemble of Researchers (MADDER)

Edray Goins (Pomona College) and Robin Wilson (Cal Poly Pomona) received funding from the Center for Undergraduate Research in Mathematics (CURM) to have students to participate in research assistantships for the academic year.

Goals

- ① **Researching and Writing Biographies** (2 hours a week)
 Verify information in the biographical narrative, and interview individuals whenever possible.
- ② **Database Quality Control** (1 hour a week)
 Update database information for individuals already profiled in the database, and add new profiles not currently in the database.
- ③ **Weekly Research Meeting** (2 hours a week)
 Students will (a) give progress reports on the profiles updated, (b) exchange with other students the drafts of written biographies, and (c) discuss assignments of names for the coming week.

Inspiration for Research

The overarching inspiration for the MAD project is to showcase Black visibility in avenues other than entertainment. While those types of careers are certainly valid, this work can hopefully show that another path is possible for Black youth. In particular, we highlight mathematics to challenge racial notions that Black people cannot succeed in this field.

The inspiration for this specific portion of the project comes from the fact that Dr. Williams stopped updating the MAD pages [10] in 2008. Thus, how many PhDs have there been since then? As a measure of quality control, we decided to start from the year 2000 in hopes that we could uncover new names in the process.

Roadblocks

Throughout our search for names, a number of roadblocks arose. Starting with the Wikipedia page, we found that the majority of the people it had listed either received their PhD before 2000 or did not receive a PhD in our outlined area of study. With using social media, we found private accounts and private groups to be an issue due to lack of access. We also found our ability to verify the year and earned degree to be a recurring roadblock that could not always be fixed by using The Mathematics Genealogy Project [12]. We are still working on finding a concrete method of verifying that we have collected all the names for each year.

Takeaways and Next steps

We wanted our research to call attention to the ability that Black people possess to achieve great heights, despite the prejudices of society. We need to celebrate and acknowledge the world advancements of these 162 PhD recipients starting from the year 2000. That said, our MADDER research is doing just that for Black Math PhDs. In the future, we hope to intensify our efforts for seeking the names of Black PhDs through attending more mathematical colloquiums, sending out more emails to institutions and recipients themselves, and circulating a google form for people to provide any information on possible recipients. Once we gain more knowledge on such persons, we will have the potential to augment our amount of biographical synthesis. We will then be able to add such text to our website, <https://www.mathad.com/home>, for the world to see.

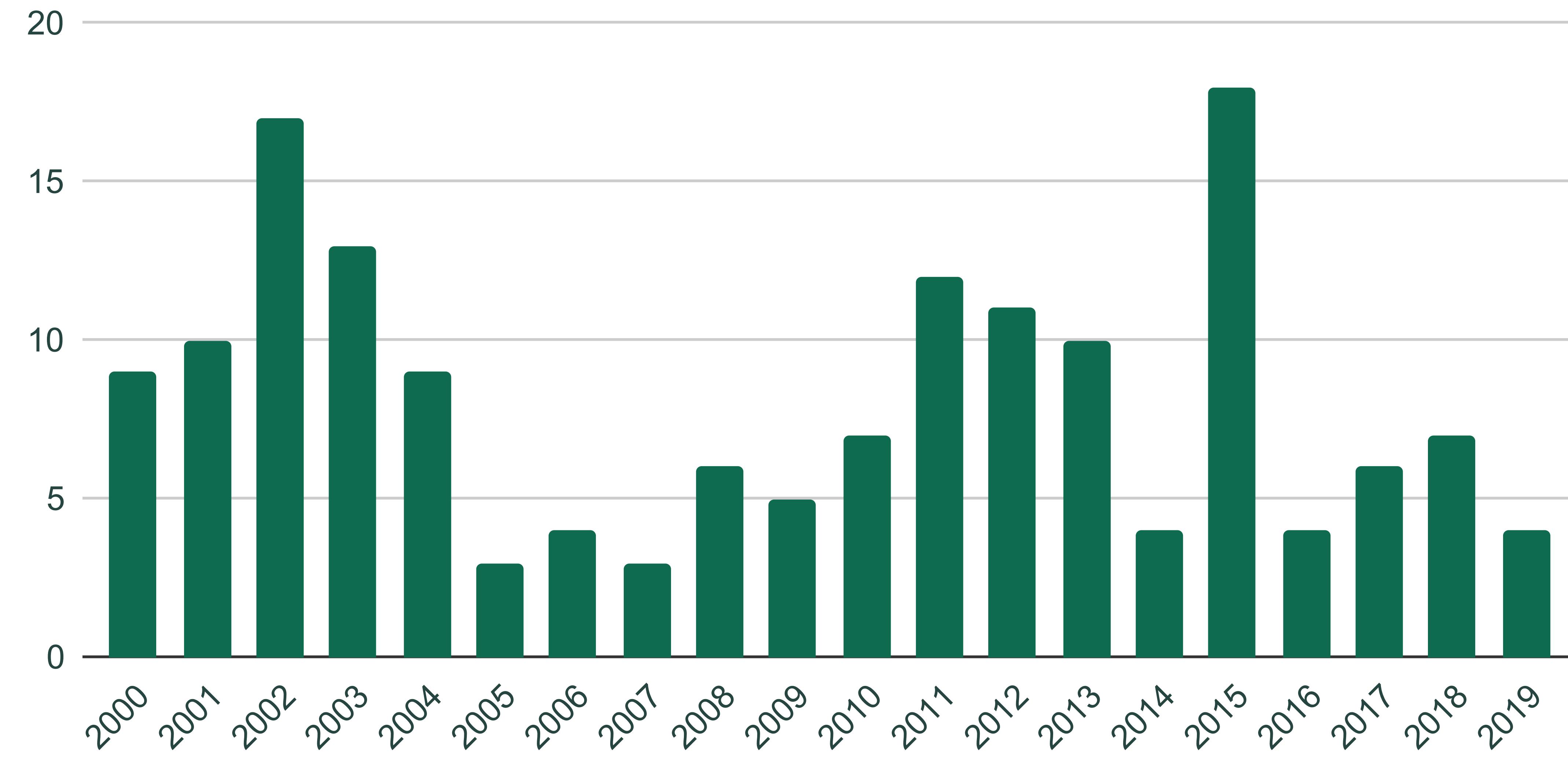
Main Research Question

What are the names of all the Black mathematicians who received their PhD from a U.S. institution between the years 2000 — 2022?

Methodology

- Before we could begin our list, we had to decide who to include. As said before, we focused on Ph.D.s from the 2000's onwards. We eventually decided that we will only record those who pursued their Ph.D. in Mathematics, rather than related degrees like Applied Math, Math Education, etc.
- We began our Google spreadsheet of names by collecting names from the Wikipedia page entitled "List of African-American mathematicians" [9].
- We then moved on to use social media as an additional tool to look for more recent graduates. In particular, Instagram was helpful, as it led us to the page "Mathematically Gifted and Black" [11], which also highlights Black mathematicians.
- We filtered through the lists of speakers from conferences like the Conference for African American Research in Mathematical Science (CAARMS) [7] and NAM's Haynes-Granville-Browne Session of Presentations by Recent Doctoral Recipients [8] to find those who have received a PhD. We also used publications from or about these conferences, such as the NAM Newsletter or university websites, as an additional source of names.
- In some occurrences, we would find names, but were unable to verify the year they were awarded their Ph.D. We would then find their profile on the Math Genealogy Project [11] to determine this.
- We cross-referenced our information with the profiles on the MAD Pages to verify whether the names we recorded were already in the database. If they were, we simply linked their profile on the Google sheet. If not, we made note of it for future entry.
- Overall, we spent 4 hours bi-weekly searching for names to add into our spreadsheet.

Number of Discovered Black Math PhDs per Year



MADDER Research Subgroups

- Subgroup #1: **Black Women in Mathematics**
 Natasha Arnold, Tianna Couch, Brandon Douglas, Tadius Frank, and Christina Marsh; led by Robin Wilson
 - Who are the first African American Women to earn PhDs in Math?**
- Subgroup #2: **Black PhDs in Mathematics from 2000 - Present**
 Dante Christian, Virgil Munyemana, and Erin Sewell; led by Edray Goins
 - Who are the recent African Americans to receive PhDs in the Math?**
- Subgroup #3: **Numbers of Black PhDs in Mathematics**
 Daniel Agbeo, Kamil English, Reia Li, and Devon Woodfine; led by Goins
 - What are the numbers of African Americans to receive PhDs in Math?**

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Acknowledgements

- Dr. Edray Herber Goins (Pomona College)
- Dr. Robin Wilson (Cal Poly Pomona)
- Department of Mathematics and Statistics, Pomona College
- Department of Mathematics, Cal Poly Pomona
- Center for Undergraduate Research in Mathematics (CURM)
- National Science Foundation (DMS-1722563)